

AD
B1

- [illegible]

TOP SECRET

- 1) nucleotides 83-1669, 245-310, 476-532, 611-679
or 719-784 of the nucleotide sequence of SEQ
ID NO:3;
- 5 m) nucleotides 247-1530, 385-450, 613-660, 745-
807 or 823-888 of the nucleotide sequence of
SEQ ID NO:5; or
- n) nucleotides 205-1599, 340-395, 568-624, 700-
765 or 784-843 of the nucleotide sequence of
SEQ ID NO:7.
- 10 2. An isolated polynucleotide which hybridizes to the
complement of the polynucleotide of Claim 1 under stringent
hybridization conditions.
3. An isolated polynucleotide which comprises the
complement of the polynucleotide of Claim 1.
- 15 4. A vector comprising the isolated polynucleotide of
Claim 1 or 2.
5. An expression vector comprising the isolated
polynucleotide of Claim 1 or 2.
- 20 6. A host cell genetically engineered to contain the
polynucleotide of Claim 1 or 2.
7. A host cell genetically engineered to contain the
polynucleotide of Claim 1 or 2 in operative association with
25 a regulatory sequence that controls expression of the
polynucleotide in the host cell.
8. An isolated polypeptide comprising:
- a) the amino acid sequence of SEQ ID NO:2;
- b) amino acid residues 72-93, 147-162, 191-211 OR
26 217-238 of SEQ ID NO:2;
- c) the amino acid sequence of SEQ ID NO:4;
- d) amino acid residues 55-76, 132-150, 177-199 or
30 213-234 of SEQ ID NO:4;

5 e) the amino acid sequence of SEQ ID NO:6;
f) amino acid residues 47-68, 123-138, 167-187 or 193-214 of SEQ ID NO:6;
g) the amino acid sequence of SEQ ID NO:8;
h) amino acid residues 46-67, 122-140, 166-187 or 194-213 of SEQ ID NO:8;
i) the amino acid sequence of SEQ ID NO:9; or
j) amino acid residues 77-98, 153-167, 197-217 or 223-242 of SEQ ID NO:9;

10. An antibody directed against the polypeptide of
Claim 8.

a) contacting the sample with a compound that binds to and forms a complex with the polynucleotide for a period sufficient to form the complex; and

12. A method for detecting a polynucleotide of Claim 1 or 2 in a sample, comprising:

25 a) contacting the sample under stringent hybridization conditions with nucleic acid primers that anneal to a polynucleotide of Claim 1 or 2 under such conditions; and

 b) amplifying the annealed polynucleotides, so that if a polynucleotide is amplified, a polynucleotide of

30 Claim 1 or 2 is detected.

-109-

000543-07130
102720-EN250660

polypeptide with a compound that modulates activity of the polypeptide for a time sufficient to modulate said activity.

18. A method of modulating activity of the polypeptide
5 of Claim 8, comprising contacting the polypeptide with a compound that modulates activity of the polypeptide for a time sufficient to modulate said activity.

10

15

20

25

30